

ABSTRACT

A System and Method for generating Cyclic Redundancy Check (CRC) values in a system adapted simultaneously handling a plurality of blocks in parallel is described. Included is a memory or other storage device for storing data blocks, wherein the
5 memory or storage device is adapted to output a plurality of data blocks in parallel. A data bus provides a data path wide enough to accommodate the parallel data blocks and is further coupled to a plurality of CRC cores coupled to the data bus, wherein CRC values are calculated for every combination of data blocks on the data bus. A multiplexer coupled to the CRC cores selects the output of one of the CRC cores based on the number
10 of valid data blocks on the data bus. Once the correct CRC value has been calculated, it is appended to a data segment, comprised of a group of data blocks, for transmission to another device.